

Statement of Work

Privileged Access Workstation

Prepared for DeKalb County

Prepared by Microsoft Services

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This Statement of Work ("SOW") and any exhibits, appendices, schedules, and attachments to it are made pursuant to Letter Agreement No. DORV177-130782-149580 ("Work Order") and describes the work to be performed ("Services") by Microsoft Corporation ("Microsoft," "us," "we," or "our") for Dekalb County ("Dekalb County." "Customer," "you," or "your") relating to your Privileged Access Workstation Project ("project").

This SOW and the associated Work Order expire thirty (30) days after their publication date, unless signed by both parties or formally extended in writing by Microsoft.

Introduction

DeKalb County is seeking to build a new Active Directory to remediate technical issues, such as a ".local" suffix in their current Active Directory Forest, which will allow them to move forward on their broader modernization goals. In support of this, Dekalb County would like to build Privileged Access Workstations that will be used to administer their new Active Directory.

The purpose of this SOW is to provide DeKalb County with the proposed scope, activities, and timeline necessary to complete this activity.

DeKalb County, like many organizations in both the commercial and government sectors, faces an increasingly challenging cyberthreat environment. Attackers have become sophisticated in both attack methodologies and in navigating business and social structures to obtain the information which they are seeking. These modern cyberattacks are adept at rapidly gaining administrative access to computing environments. These attacks are difficult to identify, and they often result in remote malicious actors gaining unfettered access to most or all of an organization's electronic documents, including emails, reports, presentations, Customer data, and other intellectual property. These attackers sometimes also target an organization as a relay point to attack customers, suppliers, employees, or trusted business partners of that organization.

Protecting against these attacks is a key priority for DeKalb County.

The Microsoft Services Privileged Access Workstation ("PAW") offer addresses the need for highly secured workstations for the administration of identity systems, application servers, cloud services, private cloud fabric, and sensitive business functions. A PAW is a hardened and locked-down workstation which is designed to help safeguard sensitive accounts and their tasks.

Using PAW is a first step toward improving security posture. PAWs can help protect privileged accounts and help reduce the risk of credential theft, lateral movement, and elevation of privileges.

The implementation of PAW should be performed together with other mitigations, such as limiting the number of highly privileged administrative accounts in on-premises IT systems and cloud services, and overall service hardening, which can help a company defend against credential theft attacks.

1. Project objectives and scope

1.1. Objectives

The objective of the engagement is to implement PAWs with applications for the following administrative tasks, which are based on Microsoft-recommended practices, architectures, accumulated field experience, and Customer requirements such as:

• Active Directory Domain Services ("AD DS") management

PAW leverages the newest and most advanced security features in Windows 10 Enterprise, including:

- Unified Extensible Firmware Interface ("EFI") Secure Boot.
- Windows BitLocker Drive Encryption.
- Windows Defender Antivirus.
- Windows Defender Credential Guard.
- Windows Defender Exploit Guard.
- Windows Defender Firewall.
- Microsoft AppLocker application whitelisting.
- Integration with Azure Log Analytics.

The default PAW image includes a number of common administrative tools, including:

- Microsoft Remote Server Administration Tools ("RSAT")
- Windows PowerShell
- Microsoft Azure PowerShell module for ARM ("AzureRM")

1.2. Areas in scope

This section details the areas which are within scope.

1.2.1. General project scope

Microsoft will provide Services in support of the following scope.

Area	Description	Assumptions
PAW Kick-Off and Solution Workshop	Microsoft will lead a one (1) day workshop during which the team kicks off the project, documents specific customer environment information and agree on the major design decisions with the Customer.	The vision and scope of the project will be documented as part of the Architecture and Design Document.
PAW Reference Architecture	Microsoft will use the PAW reference architecture.	PAW reference architecture can be deployed in the Customer environment as is, without modification.

Area	Description	Assumptions
PAW Administrative Workstation Image	Configure a single workstation image for one (1) hardware model or type.	
	One administrative workstation image for Windows 10 Enterprise will be prepared with the Microsoft Deployment Toolkit ("MDT"). This image is designed for one (1) specific administrative application. This is time-boxed to three (3) days.	
Administrative Workstation Deployment	Deploy of up to five (5) PAWs.	The Customer will have the workstation hardware ready before the start of the project.
AD DS	Microsoft will help the Customer deploy organizational units ("OUs") and group policy objects ("GPOs") and grant permissions for the PAW images in production AD DS (one (1) domain) based on the predefined Microsoft PAW reference architecture.	PAW reference architecture can be deployed in the Customer environment as-is, without modification.
System Testing Assistance	PAW solution item testing assistance rendered to Customer (applies to items within the nonproduction build environment).	Testing assistance is constrained to the time allocated during this project.
	System testing focuses on the functionality meeting the design. This is time-boxed to two (2) days.	
Operational Guidance	A document containing recommended operational guidance and practices which can be used to maintain the security infrastructure and systems within the PAW. This document will include practices and procedures which define service ownership functions and roles.	
One Deployment	PAWs will be deployed in a physically secure room and connected to the simulated production AD DS. After testing is complete, the solution will be disconnected from the simulated AD DS, moved to the datacenter, and connected to the production AD DS.	The physically secure room that contains the server hardware will be ready before the project starts. Customer to provide the simulated AD environment for testing

Area	Description	Assumptions
Envisioning	Provide a vision and scope document—written in Microsoft Word—which will define the scope of this project and the high-level architectural concept based on the decisions made during the Envisioning workshop.	The preliminary document will be shared during a review meeting, at which time feedback will be gathered. Microsoft will take this feedback and make agreed-upon updates to create a final version.
Planning	Provide a technical guide document—written in Word—which will detail the security design and implementation activities which will be deployed to meet the scope of this feature area.	The preliminary documents will be shared during a review meeting, at which time feedback will be gathered. Microsoft will take this feedback and make agreed-upon updates to create a final version.
Stabilization	Provide a Test Plan—written in Word—which will detail necessary testing and validation procedures which will be used to test the system functionality of this feature area.	The preliminary documents will be shared during a review meeting, at which time feedback will be gathered. Microsoft will take this feedback and make agreed-upon updates to create a final version.
Stabilization	Validate the system functionality in a lab during the Build Phase.	The Customer will build a baseline lab to test Windows 10 security functionality and VPN profile configurations.
Deploy	Help deploy the feature in a limited production environment and help test the configurations and functionalities based on the Test Plan.	Microsoft will help deploy Windows 10 security and required component VPN profile configurations into a production environment. The production deployment will be limited to no more than fifty (50) devices.

1.2.2. Software products and technologies

The products and technology which are listed in the following table are required for the project. The Customer is responsible for obtaining all identified licenses and products.

Important note: unless otherwise agreed to in the Work Order, the Customer temporarily appoints Microsoft to act as its agent for the limited purpose of accepting and agreeing to the user terms of any click-through license agreement which accompanies the software (Microsoft or non-Microsoft) which is listed in this SOW or the Work Order and is included within the test and development environments. The Customer can read these terms by clicking the **About** box in the toolbar ribbon for the specific product at <u>www.microsoft.com</u> or by requesting a copy from the Microsoft Project Manager.

Unless otherwise agreed to in writing in the Work Order, the Customer temporarily entitles Microsoft to act as its agent for the download of the required software. With this authority, Microsoft can apply the known-good media process to download and validate the required software and can compile the software into a specific disk image structure which can be used to build an MDT server or provide a known good build ISO image.

Product and technology item	Version	Ready by
Windows Server	2016 or newer	Start of the project
Windows	10 Enterprise x64	Start of the project

The following software packages will be required for the solution and are available as Internet downloads at no cost. Microsoft will provide a text file with packages, versions, and their respective download locations. A script will be provided to help download the required files.

Product and technology item	Ready by
Microsoft BGInfo (from the Sysinternals Suite)	Scripted download
Microsoft Assessment and Deployment Kit ("ADK")	Scripted download
Windows Management Framework	Scripted download
Microsoft Report Viewer	Scripted download
Microsoft Deployment Toolkit ("MDT")	Scripted download

Product and technology item	Ready by
Microsoft .NET Framework	Scripted download
Microsoft Attack Surface Analyzer	Scripted download
Microsoft Network Monitor	Scripted download
Microsoft Message Analyzer	Scripted download
RSAT for Windows	Scripted download
Microsoft LAPS	Scripted download
TCPView for Windows (from the Sysinternals Suite)	Scripted download
Microsoft Process Explorer (from the Sysinternals Suite)	Scripted download
Microsoft Process Monitor (from the Sysinternals Suite)	Scripted download
Microsoft PsTools (from the Sysinternals Suite)	Scripted download
Administrative templates for Windows 10	Scripted download
Gemalto smart card MiniDriver	Scripted download
Microsoft RDC Manager ("RDCMan")	Scripted download
Microsoft SQL Server Tools	Scripted download

1.2.3. System integration

The following system integration is in scope for the project.

Integration	Description of scope	Responsibility	Ready by
Simulated AD DS	The PAW deployment will be tested in the simulated production AD DS. A virtual machine with a domain controller is sufficient.	Customer	Start of the project
Production AD DS	AD DS membership - the PAWs will be joined to the production domain. AD DS configuration - OUs, GPOs, and delegated permissions will be added to the production AD DS service.	Customer	Start of the project

1.2.4. Environments

The following table provides information about the development and test facilities which are to be used by the project team members. For the following environments, Customer will be responsible for allocating and setting up the base hardware, network hardware, and network connectivity, and will provide the required software. The joint Microsoft and Customer team will install and configure the software products shown in this document.

Environment	Location	Responsibility	Ready by
Build	Dedicated secure room	Customer	Before the Build Phase of this project
Production	Secure datacenter	Customer	Before the Deploy Phase of this project

1.2.5. Testing and defect remediation

Testing

The following testing is included in the scope of the project. If the Customer has responsibility for testing, the Microsoft effort to support that activity is identified. If additional time is needed for Microsoft testing support, then it can be requested as described in this SOW.

Test type	Description	Responsibility		
(environment)		Has responsibility for testing?	Provides data or test cases	Provides guidance and support
System Testing (Build)	System testing focuses on the functionality meeting the design. The testing duration is time-boxed to two (2) days. Test cases are based on the test guide.	Microsoft	Customer	Microsoft
Customer Acceptance Testing (Production)	This consists of testing administrator functionality of key real-world scenarios. Test cases are based on the operations guide. Testing duration is time-boxed to one (1) day.	Customer	Customer	Microsoft

Defect remediation

If defects are identified during testing, the priority of the item will be jointly agreed upon by the Customer and Microsoft. Defect prioritization is defined in the following table.

Priority	Description	Remediation in scope?
P1	Blocking defect Development, testing, or production launch cannot proceed until this type of defect is corrected. A defect of this type blocks further progress in this area. The solution cannot ship, and the project team cannot achieve the next milestone until such a defect is corrected.	Yes
P2	Significant defect This type of defect must be fixed prior to moving to production. Such a defect, however, will not affect test plan implementation.	Yes
Р3	Important defect It is important to correct this type of defect. However, it is possible to move forward into production through the use of a workaround.	No; the problem will be logged. Remediation will be performed through an agreed-upon change request only.
P4	Enhancements and low priority defects P4 defects consist of feature enhancement and cosmetic defects. These include design requests which vary from original concepts.	No; the problem will be logged. Remediation will be performed through an agreed-upon change request only.

Note: product bug fixes and design change requests are not in scope. Product-related issues must be addressed separately through Premier support.

1.2.6. Training

Informal knowledge transfer will be provided throughout the project. Informal knowledge transfer is defined as information shared when Customer staff members work side by side with Microsoft staff. This could include whiteboard discussions, email threads, conference calls, and facilitated meetings regarding technical topics. Transfer activities are secondary to completing deliverables and maintaining the project schedule. No deliverables or meeting summaries will be provided for the following sessions or activities.

1.3. Areas out of scope

Any area not explicitly included in the Areas in scope section is out of scope for Microsoft during this project. Areas out of scope for this project are listed in the following table.

Area	Description
Physical Server Setup, Management, and Maintenance	Physical server setup, installation, and networking interfaces or evaluation of new hardware or software. Ongoing production operational support.

Area	Description
PAW Enterprise Functions	Windows 10 Enterprise functionalities such as Internet Protocol Security (IPsec), smart card logon, Windows Defender Device Guard, and Windows Defender Application Guard.
PAW as a Virtual Machine	Deploying one (1) or multiple PAWs and productivity workstation as virtual machines (unless added as an option to this engagement).
Discovery	Discovery and categorization of administrative tasks and applications.
Multiple Domain or Forest Support	Support for more than one (1) domain or forest. (This project focuses on implementing one (1) domain in the core production forest. It will not provide a model for the management of other domains or forests. However, the PAWs built by this project can be used to administer other forests in the future.)
Role Definition	Custom definition of roles and the creation of new accounts or roles (such as groups).
Log Analytics ("OMS") Configuration	Configuration of Log Analytics dashboards, reports, or related items beyond onboarding the PAWs.
Operations	Operational assessments, improvement plans, or designs for new operational processes or procedures beyond the documented guidance as delivered within the operations guide.
Current Production Environment	Changes to the current environment to resolve issues which are not related to the defined scope of this project.
Monitoring Services	Setup or configuration of monitoring, auditing, or alerting services to monitor the health of the environment beyond any items which are explicitly included in the scope.
Migration or Consolidation	Migration, consolidation, or rationalization of AD DS objects, including users, groups, workstations, servers, applications, or group policies—this includes logon scripts and data migration.
Support	Post-deployment support. Additional support can be purchased separately.
General Production domain Hardening	Securing of AD DS components other than privileged user accounts. (General hardening of servers such as domain controllers is out of scope.)

2. Project approach, estimated timeline, and deliverable acceptance

This chapter details the PAW project approach, timeline, and service deliverables.

2.1. Approach

The project will be structured following the Microsoft solution delivery methodology across five (5) distinct phases: Envision, Plan, Build, Stabilize, and Deploy. Each phase has distinct activities and deliverables which are described in the following sections.

If a deliverable requires formal review and acceptance (a process described in the Deliverable acceptance process section), this is indicated in the following sections.



2.1.1. Engagement initiation

Category	Description
Microsoft Activities The activities to be performed by Microsoft	Conduct a pre-initiation call to initiate team formation and communicate expectations. Document the project launch prerequisites using input from this SOW. Track the status of launch prerequisites and adjust the engagement initiation phase start date accordingly. Conduct a detailed walk-through of the SOW with the Customer and reach agreement with the Customer on an initial project schedule and approach.
Customer Activities The activities to be performed by the Customer	Attend and participate in the pre-initiation call. Assign project initiation and launch prerequisites responsibilities to accountable Customer leadership and establish target completion dates. Complete the project initiation and launch prerequisites. Staff the project with the required Customer resources in the time frames which were agreed upon in the pre-initiation call.

Before beginning the project, the following prerequisites must be completed.

2.1.2. Envision

During the Envision Phase, the team (Microsoft and the Customer) will reach agreement on a shared vision for the project and the specific scope which will be required to make that vision a reality.

The team will kick the project off by coordinating a series of envisioning working sessions with key stakeholders to verify requirements and gather data about the existing environment. Microsoft will then create a project vision and scope section in the architecture and design document which will serve as the project's charter, align expectations among the project team and stakeholders, and document the requirements.

Category	Description	
Microsoft Activities The activities to be performed by Microsoft	Conduct the kick-off meeting. The design sessions will cover conceptual PAW reference architecture. Agree on the vision and scope and document them in the Technical Guide deliverable. Create a project plan with key milestones. This is a preliminary, high-level project plan with key milestones.	
Customer Activities The activities to be performed by the Customer	Gather information which might be requested during the Envision Phase Workshop. Review the Vision and Scope Document deliverable and participate in its approval process. Make decisions when architectural options are presented. Engage operations and service owners to help raise awareness about systems to be implemented.	
Key Assumptions	Customer service owners and architects have been identified and will attend and participate in the PAW Envisioning Workshop.	

Deliverables

Name	Description	Acceptance required?	Responsibility
Draft Project Plan	A preliminary version of the Project Plan with key milestones.	No	Microsoft

2.1.3. Plan

During the Plan Phase, Microsoft will work with the Customer to develop and meet the technical and functional requirements in the logical and physical designs, and to define and describe the environment end state. Microsoft will record the PAW design in the technical guide document. The Project Plan will be updated to reflect the detailed timeline for the Build, Stabilize, and Deploy Phases.

Category	Description	
Microsoft Activities The activities to be performed by Microsoft	 Update the Technical Guide Document with Customer environment information. Review the Technical Guide with the Customer. Review the Project Plan with the Customer 	
Customer Activities The activities to be performed by the Customer	Gather the information requested during the planning design sessions. Review the Technical Guide Document and participate in its approval Customer subject matter experts ("SMEs") will participate in the design sessions and make decisions when architectural options are presented.	
Key Assumptions	PAW reference architecture can be deployed in the Customer environment as-is, without modification.	

Deliverables

Name	Description	Acceptance required?	Responsibility
Technical Guide	A document with PAW reference architecture including description of the solution and its components, logical solution, and its physical implementation.	No	Microsoft
Final Project Plan	Final version of the Project Plan with key milestones.	No	Microsoft

2.1.4. Build

During the Build Phase, the team builds the PAW solution components in a physically secure room. The goal of this phase is to help the team connect the PAW deployment to the simulated production Active Directory environment.

Category	Description		
Microsoft Activities The activities to be performed by Microsoft	 Build the MDT server used to deploy PAWs. Deploy one (1) PAW image on up to five (5) production workstations which are attached to a simulated production AD DS. Update Test Guide Document. Review Test Guide Document with the Customer. Update Implementation Guide Document. Review Implementation Guide Document with the Customer. 		
Customer Activities The activities to be performed by the Customer	Participate in Build Phase activities. Participate in review activities.		
Key Assumptions	Customer SMEs will participate in the development sessions. The Costumer will provide appropriate secure room facilities, including hardware and software. The Customer will provide Customer-specific test cases.		

Deliverables

Name	Description	Acceptance required?	Responsibility
Implementation Guide Document	A document with configuration information and step-by-step instructions used to build the end state described in the Architecture and Design Document	No	Microsoft
Test Guide	A document with test cases that documents testing procedures.	No	Microsoft

2.1.5. Stabilize

During the Stabilize Phase, the combined Microsoft and Customer team will implement the Test Guide in the physically secure room, document the results for the test cases, and validate the Build process. Microsoft will record the recommended operational practices and procedures in the Operations Guide.

The Stabilize Phase is complete when the solution has been verified through the implementation of the Test Guide by the Customer.

Category	Description		
Microsoft Activities The activities to be performed by Microsoft	 Conduct functional testing using the test cases from the test guide. This activity is time-boxed to two (2) days. Update the Operations Guide Document. Review the Operations Guide with the Customer. 		
Customer Activities The activities to be performed by the Customer	Engage designated test users. Perform system testing based on the Test Guide. Review the Implementation Guide and participate in its approval. Review the Operations Guide and participate in its approval.		
Key Assumptions	Customer SMEs and test users are ready to participate in the testing activities. A post-deployment support process will be established by the Customer prior to commencement of the Deploy Phase.		

Deliverables

Name	Description	Acceptance required?	Responsibility
Operations Guide Document	A document with operational guidance for the systems and components which are described in the Architecture and Design Document.	No	Microsoft

2.1.6. Deploy

The Deploy Phase begins with the implementation of the PAW solution for production use. The PAW deployment in the physically secure room will be disconnected from the simulated production Active Directory environment, and the PAWs will be moved to the datacenter and connected to the real production Active Directory environment.

The Customer will, based on the Operations Guide, validate the solution functionality in the production environment. Customer will have one (1) day to validate the functionality of the new administrative workstations within its organization.

After the validation tests are completed, the production rollout begins. First, Customer's administrators will use the solution to perform their daily work. During the rollout, these administrators will report problems which must be addressed and will work with Microsoft to troubleshoot and resolve these problems.

Category	Description	
Microsoft Activities The activities to be performed by Microsoft	 Connect PAW to the production environment During PAW production implementation, Microsoft will assist as needed as the Customer puts the Implementation Guide into effect. Microsoft support activities are limited to the first five (5) PAWs in the Customer's production forest. Handover and close out the project. 	
Customer Activities The activities to be performed by the Customer	Deploy the solution to production. Provide direction to Microsoft resources during this project phase. Run Customer acceptance tests. Provide feedback on production use. Provide sign-off for project results.	
Key Assumptions	 The Customer will take responsibility for its change control processes (e.g., submitting all necessary change requests) Affected organizations will identify the resources and groups which will be required for the Deploy Phase. The deployment process for one (1) production domain and up to five (5) PAWs will help the Customer continue and finalize integration of additional PAWs, if necessary. 	

Deliverables

Name	Description	Acceptance required?	Responsibility
Up to five (5) Production PAWs Deployed	Up to five (5) production PAWs have been successfully deployed and tested.	No	Microsoft

2.2. Estimated Timeline

It is estimated that this engagement will be performed in approximately three (3) weeks and will include the phases and milestones noted. The actual timeline for this engagement will be relative to the project start date, and all dates and durations provided are estimates only.

A typical project schedule is depicted in the following table.



2.3. Deliverable acceptance process

During the project, Microsoft will submit certain deliverables (listed in the Approach section as deliverables with "Acceptance required?" equal to "Yes") for the Customer's review and approval.

Within three (3) business days of the date of submittal, the Customer is required to:

Accept the deliverable by signing, dating, and returning a service deliverable acceptance form, which can be sent by email, or by using (or partially using) the deliverable;

Or

Reject the deliverable by notifying Microsoft in writing; the Customer must include a complete list of reasons for rejection.

2.4. Project governance

The governance structure and processes the team will adhere to for the project are described in the following sections:

2.4.1. Project communication

The following will be used to communicate during the project:

- **Communication Plan**: this document will describe the frequency, audience, and content of communication with the team and stakeholders. It will be developed by Microsoft and the Customer as part of project planning.
- **Status Reports**: the Microsoft team will prepare and issue regular Status Reports to project stakeholders per the frequency defined in the Communication Plan.
- **Status Meetings**: the Microsoft team will schedule regular Status Meetings to review the overall project status, the acceptance of deliverables, and review open problems and risks.

2.4.2. Risk and issue management

The following general procedure will be used to manage active project issues and risks during the project:

- **Identify**: identify and document project issues (current problems) and risks (potential problems which could affect the project).
- **Analyze and Prioritize**: assess the potential impact and determine the highest priority risks and problems which will be actively managed.
- **Plan and Schedule**: determine the strategy for managing priority risks and issues and identify a resource who can take responsibility for mitigation and remediation.
- Track and Report: monitor and report the status of risks and problems.

- **Escalate**: escalate to project sponsors the high impact problems and risks which the team is unable to resolve.
- **Control**: review the effectiveness of risk and issue management actions.

Active issues and risks will be regularly monitored during the project.

2.4.3. Change management process

During the project, either party is able to request modifications to the Services described in this SOW. These changes only take effect when the proposed change is agreed upon by both parties. The change management process steps are:

- **The change is documented**: all change requests will be documented by Microsoft in a Microsoft change request form and submitted to the Customer. The change request form includes:
 - A description of the change.
 - The estimated effect of implementing the change.
- The change is submitted: the change request form will be provided to the Customer.
- **The change is accepted or rejected**: the Customer has three (3) business days to confirm the following to Microsoft:
 - Acceptance—the Customer must sign and return change request form.
 - Rejection—if the Customer does not want to proceed with the change or does not provide an approval within three business days, no changes will be performed.

2.4.4. Escalation path

The Microsoft project manager will work closely with the Customer project manager, sponsor, and other designees to manage project issues, risks, and change requests as described previously. The Customer will provide reasonable access to the sponsor or sponsors in order to expedite resolution. The standard escalation path for review, approval, or dispute resolution is as follows:

- Project team member (Microsoft or the Customer)
- Project Manager (Microsoft and the Customer)
- Microsoft Delivery Manager
- Microsoft and the Customer Project Sponsor

2.5. Project completion

Microsoft will provide services defined in this SOW to the extent of the fees available and the period of performance specified in the Work Order. If additional services are required, the Change management process will be followed and the contract modified. The project will be considered complete when at least one (1) of the following conditions has been met:

- All fees available have been utilized for services delivered and expenses incurred.
- The term of the project has expired.
- All Microsoft activities and in-scope items have been completed.
- The Work Order has been terminated.

2.6. Project roles and responsibilities

The key project roles and the responsibilities are as follows.

Customer

Role	Responsibilities	
Project Sponsor	Part-time availability with expected allocation of 2–4 hours a week. Make key project decisions. Serve as a point of escalation to support clearing project roadblocks.	
Project Manager	Full-time availability with expected allocation of 20–40 hours. Serve as primary point of contact for the Microsoft team. Manage the overall project. Deliver the project on schedule. Take responsibility for Customer resource allocation, risk management, and project priorities. Communicate with executive stakeholders.	
Technical Team Lead	Expected allocation of 16-40 hours a week. Available for and responsive to <i>ad hoc</i> technical, operational, or process questions. Serve as primary technical point of contact. Take ownership of technical architecture and code deliverables.	
Technical Architect	Expected allocation of 4-12 hours a week. Available for and responsive to <i>ad hoc</i> technical, operational, or process questions. Full-time availability with expected allocation of 4–12 hours a week. Responsible for quality assurance ("QA") and escalation of technical decisions and issues.	
Test and QA Lead	Expected allocation of 4-12 hours a week. Available for and responsive to <i>ad hoc</i> technical, operational, or process questions. Take responsibility for test plans and guides and coordinating the acceptance testing of resources.	
AD DS SMEs	Expected allocation of 4-12 hours a week. Available for and responsive to <i>ad hoc</i> technical, operational, or process questions. Provide AD DS technical representation.	
Security SMEs	Expected allocation of 4-12 hours a week. Available for and responsive to <i>ad hoc</i> technical, operational, or process questions. Provides technical representation for cybersecurity as it relates to the security architecture to be implemented.	
Other SMEs	Expected allocation of 4-12 hours a week. Available for and responsive to <i>ad hoc</i> technical, operational, or process questions. Provide technical representation related to systems and services, including network, DNS, PKI, and smart card integration.	

Microsoft

Role	Responsibilities	Project commitment
Microsoft Delivery Manager	 Manage and coordinate the overall Microsoft project. Serve as a single point of contact for escalations, billing issues, personnel matters, and contract extensions. 	Part time
Microsoft Project Manager	Take responsibility for issue and risk management, change management, project priorities, status communications, and status meetings. Coordinate Microsoft and Microsoft subcontractor resources but not Customer resources.	Part time
Microsoft Architect	Provide technical oversight. Verify whether Microsoft-recommended practices are being followed. Take responsibility for overall technical solution management.	Part time
Microsoft Consultant	Provide technical design leadership. Deliver workshops and sessions. Take responsibility for development of technical deliverables.	Full time

3. Customer responsibilities and project assumptions

3.1. Customer responsibilities

In addition to Customer activities defined in the Approach section, the Customer is also required to:

- Provide information:
 - This includes accurate, timely (within three (3) business days or as mutually agreed-upon), and complete information.
- Provide access to people and resources.
 - This includes access to knowledgeable Customer personnel, including business user representatives, and access to funding if additional budget is needed to deliver project scope.
- Provide access to systems.
 - This includes access to all necessary Customer work locations, networks, systems, and applications (remote and onsite).
- Provide a work environment.
 - o This consists of suitable work spaces, including desks, chairs, and Internet access.
 - A dedicated physically secure room with desks, chairs, and network access which the project team can use for the duration of the project (should be ready before the project kick-off):
 - A secure storage location for documentation and DVDs which will be used on the project (this place would preferably be in the secure room)
 - At least one (1) DVD-writing device (external or built-in) in the project room
 - A stack of twenty (20) writable single-layer DVDs

- Paper shredder, ideally also capable of shredding DVD media
- A separate dedicated Internet connection for the secure room with at least sixteen (16) megabits a second downstream which can be used for the known-good media build process
- A centralized project repository for project information and documentation
- Provide the following:
 - At least one (1)physical server used for the build and production environment capable of running virtual machines on Hyper-V.
 - Simulated production AD DS. One virtual machine with domain controller function is suitable.
 - Five (5) unused and unopened laptops or desktops which will be used as production PAWs
 - Test data and personnel which will be needed to conduct solution system testing, including interfaces.
 - Test data and personnel which will be needed to conduct customer acceptance testing of the solution, including interfaces.
 - Log Analytics Contributor rights (Azure RBAC) on a Log Analytics workspace in one of the Customer's Azure subscriptions for the user who will add the monitoring solutions to the Azure Log Analytics workspace. The Log Analytics workspace stores the log data, which are used to monitor PAWs.
 - Log Analytics Reader rights (Azure RBAC) on a Log Analytics workspace in one of the Customer's Azure subscriptions for the users who need to view and search Azure Log Analytics monitoring data.
- Manage non-Microsoft resources.
 - The Customer will assume responsibility for the management of all customer personnel and vendors who are not managed by Microsoft.
- Manage external dependencies.
 - The Customer will facilitate any interactions with related projects or programs in order to manage external project dependencies.

3.2. Project assumptions

The project scope, services, fees, timeline, and our detailed solution are based on the information provided by the Customer to date. During the project, the information and assumptions in this SOW will be validated, and if a material difference is present, this could result in Microsoft initiating a change request to cover additional work or extend the project duration. In addition, the following assumptions have been made:

- Work day:
 - The standard work day for the Microsoft project team is between 8 AM and 5 PM, Monday through Friday.
- Standard holidays:
 - Observance of consultants' country-of-residence holidays is assumed and has been factored into the project timeline.
- Remote working:
 - The Microsoft project team may perform services remotely.

- If the Microsoft project team is required to be present at the Customer location on a weekly basis, resources will typically be on site for three (3) nights and four (4) days, arriving on a Monday and leaving on a Thursday.
- Language:
 - All project communications and documentation will be in English. Local language support and translations will be provided by the Customer.
- Staffing:
 - If necessary, Microsoft will make staffing changes. These can include, but are not limited to, the number of resources, individuals, and project roles.
- Documentation:
 - All document deliverables will be on Microsoft standard templates.